

Notice of Allowability

Application No.

10/603,277

Applicant(s)

ROSNELL, SEPPO

Examiner

Quochien B. Vuong

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/25/2003.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 6/25/03, 10/18/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Reasons for Allowance

1. Claims 1-23 are allowed over the cited prior art.
2. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 1 and 13, Kolanek (US 6,147,553) disclose a transmitter and a method of controlling the power level of a signal output by a transmitter (figure 1), comprising: a modulator providing a phase-modulated constant-envelope radio-frequency signal; a dividing unit (3) dividing a signal provided by said modulator into a first signal (a1) and a second signal (a2) which are identical to each other; a first processing branch for processing a respective first signal provided by said dividing unit, said first processing branch comprising a first phase shifter and a first power amplifier connected to each other in series; a second processing branch for processing a respective second signal provided by said dividing unit, said second processing branch comprising a second phase shifter and a second power amplifier connected to each other in series; a combining unit combining signals provided by said first and said second processing branch (column 3, line 44 – column 5, line 40). And Sender (US 6,690,233) discloses a transmitter and a method of controlling the power level of a signal output by a transmitter (figure 6), comprising: a dividing unit dividing a signal provided by said modulator into a first signal and a second signal; a first processing branch for processing a respective first signal provided by said dividing unit; a first control arrangement for controlling the amplifications of the first signal and second signal; a second control arrangement for controlling the phase shifts of the first and second signals; and a combining unit combining signals provided by said first and said

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second processing branch (column 4, line 46 – column 5, line 6). However, the signal of Sander is not phase-modulated constant-envelope, and the first and second signals are not identical; while Kolanek fails to disclose the transmitter and method further comprising a first control arrangement for controlling the power of a signal output by said combining unit at least for higher power levels by controlling the amplifications applied by said first power amplifier and by said second power amplifier to a respectively received signal; and a second control arrangement for controlling the power of a signal output by said combining unit at least for lower power levels by controlling the phase shifts applied by said first phase shifter and by said second phase shifter to a respectively received signal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 06/25/2003 and 10/18/2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stengel et al. (US 5,892,395) disclose method and apparatus for efficient signal power amplification.

Wakabayashi (US 6,295,273) discloses phase modulation multiplexing transmission unit and phase modulation multiplexing method.

Lomp (US 6,611,548) disclose multipath processor.

McCune (US 6,636,112) discloses high-efficiency modulating RF amplifier.

Okubo et al. (US 6,728,298) disclose spread spectrum communication system and method for the same.

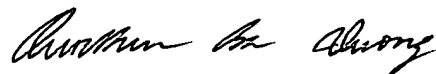
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quochien B. Vuong
Oct. 03, 2005.



QUOCHIEN B. VUONG
PRIMARY EXAMINER